

RPS Solar Carve Out Colorado

Renewable Portfolio Standard (RPS)

Renewable Portfolio Standards (RPSs) are a policy tool enacted by many states to stimulate growth of the renewable energy industry. They require utilities to generate or purchase a certain amount of their electricity from renewable energy within a specified time frame. If a utility does not meet this goal, they are often subject to a penalty known as an Alternative Compliance Payment (ACP). Renewable Energy Credits (RECs) are tradable credits which represent the electricity generated from a renewable resource that utilities can purchase to meet their RPS goal. Solar Renewable Energy Credits (SRECs) are a form of RECS that represent electricity generated from a solar system. RECs are subject to market dynamics with the set ACP effectively functioning as a price floor. RPSs are different in every state.

Solar carve outs and credit multipliers are included in most RPSs because the programs tend to favor lower cost renewable technologies, and these programs provide incentives for the deployment of more costly technologies.¹ Solar carve outs require a certain percentage of the RPS be met with solar energy, while credit multipliers offer additional credit toward compliance for energy derived from solar sources. From 2005-2009, 65-81% of the total grid connected PV in the United States (excluding California) occurred in states with active or forthcoming solar carve outs.² The types of solar technology eligible under these incentives vary depending on a state's RPS goals.

Solar Installation across the US

- The United States has over 5,700 MW of installed solar electric capacity³
- In the Mid-Atlantic states and New York about 23% of solar installations were attributed to RPSs⁴
- 16 States and the District of Columbia have unique solar or direct generation (DG) carve outs in their RPS⁵
- If full RPS compliance is achieved there will be 93 GW of new renewable energy online in the United States by 2035⁶

Colorado RPS

Colorado became the first state to establish a RPS by ballot initiative in 2004. Between 2007 and 2010, the RPS requirement was increased from 10% to 30% by 2020 for investor-owned utilities, while municipal utilities, and cooperatives were issued an RPS requirement for the first time: 10% by 2020.⁷ Colorado has a distributed generation (DG) carve out, requiring 3% of retail electricity sales to come from on-site sources (including solar) by 2020. The state also offers a credit multiplier, 300%, for solar facilities that come online before July 1, 2015.⁸ The state has another credit multiplier (200%) available for electricity generated from community based projects (owned by residents, co-op, tribes, local government, etc.) that generate less than 30 MW, as well as a multiplier for energy generated within the state itself (150%). Both solar thermal electric and solar PV are eligible renewable technologies under the RPS.⁹

Americans Support Solar...

- 9 out of 10 Americans approve of renewables¹⁰
- The solar industry employs 119,000 Americans¹¹
- In order to reduce costs for the rate payer, many states, including Colorado, have cost caps for their RPS¹²

Solar Prices Declining: Nationally, the average solar installation price declined by 19.3% and the price of residential systems fell by 15.3% year-over-year. Installation prices fell in every major residential market with Colorado reaching installed costs as low as \$4.00/watt.¹³

¹ DSIRE. SOLAR, Solar Set-Asides in Renewable Portfolio Standards. <http://www.dsireusa.org/solar/solarpolicyguide/?id=21>

² Wiser, Ryan, Barbose, Galen & Holt, Edward. (October 2012). Supporting Solar in Renewable Portfolio Standards: Experience from the United States, p. 25. <http://eetd.lbl.gov/ea/ems/reports/lbnl-3984e.pdf>

³ SEIA. Solar Industry Data. <http://www.seia.org/research-resources/solar-industry-data>

⁴ Barbose, Galen (November 1, 2012). Renewable Portfolio Standards: A Status Update (Power Point Presentation), p. 15. *Lawrence Berkley National Lab*

⁵ Id.

⁶ Id.

⁷ ORCD/IEA (2008). Renewable Portfolio Standard –Colorado. <http://www.iea.org/dbtw-wpd/Textbase/pm/?mode=re&action=detail&id=553>

⁸ DSIRE SOLAR, Solar Set-Asides in Renewable Portfolio Standards. <http://www.dsireusa.org/solar/solarpolicyguide/?id=21>

⁹ DSIRE, Colorado: Renewable Energy Standard. http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=CO24R

¹⁰ SCHOTT Solar Barometer/SEIA (2011). New Poll: 9 Out of 10 Americans Support Solar, Across Political Spectrum. <http://www.seia.org/news/new-poll-9-out-10-americans-support-solar-across-political-spectrum>

¹¹ The Solar Foundation (November 2012). National Solar Census, p.5.

<http://thesolarfoundation.org/sites/thesolarfoundation.org/files/TSF%20Solar%20Jobs%20Census%202012%20Final.pdf>

¹² Barbose, Galen (November 1, 2012). Renewable Portfolio Standards: A Status Update (Power Point Presentation), p. 29. *Lawrence Berkley National Lab*.

¹³ SEIA/GTM (2012). U.S. Solar Market Insight Report: Q3 2012, *Executive Summary*, p.10. <http://www.seia.org/research-resources/solar-market-insight-report-2012-q3>

About the Solar Energy Industries Association®

Established in 1974, the Solar Energy Industries Association is the national trade association of the U.S. solar energy industry. Through advocacy and education, SEIA® and its 1,100 member companies are building a strong solar industry to power America. As the voice of the industry, SEIA works to make solar a mainstream and significant energy source by expanding markets, removing market barriers, strengthening the industry and educating the public on the benefits of solar energy.

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